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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,064	02/18/2000	Chang-Ho Oh	12705-8011	8894

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Perkins Cole L L P
1201 Third Avenue
Suite 4800
Seattle, WA 98101

EXAMINER

ABEL JALIL, NEVEEN

ART UNIT PAPER NUMBER

2165

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/507,064	Applicant(s) OH, CHANG-HO	
	Examiner Neveen Abel-Jalil	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 23, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-56 is/are allowed.
- 6) ☒ Claim(s) 57-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. The amendment filed on July 23, 2004 has been received and entered. Claims 1-61 are pending.

Claim Objections

2. Claims 29-30, 39, 45, 52, 56, and 60-61 are objected to under 37 CFR 1.75(c) as being improperly written multiple dependent claims, but are in fact multiple independent claims. Claims 29-30, 39, 45, 52, 56, 60-61 should be re-written either as separate independent claims or separate claims containing independent and corresponding dependent claims. See MPEP § 608.01(n). Accordingly, the claims are independent claims and should be written as such. They are claiming different and distinct embodiments of the claimed invention.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 8-24, 35-55 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, directed towards an data structure.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine

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which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Database Structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are neither physical "things" nor statutory processes. Applicant's claims are not within any of the statutory classes. "A database structure" should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 57-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 57, line 7, the limitation "a described model element" render the claim(s) indefinite because it is unclear to the examiner "which structure or description or model element" is being referenced by the limitation. Is it the first structure, or the description of the first structure or the model of the description of the first structure?

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 57-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowman-Amuah (U.S. Patent No. 6,662,357 B1).

As to claim 57, Bowman-Amuah discloses a computer-readable medium containing a model segment data structure such that a complete model can be created from multiple model segments (See column 2, lines 20-40), the data structure comprising:

at least one description of a model element (See column 131, lines 22-28) having a first structure (See column 81, lines 43-67, wherein “first structure” reads on “structure”);

at least one reference to another model element having a second structure and whose description is contained in another model segment (See column 75, lines 30-67, also see column 82, lines 1-67); and

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a description of a relationship between a described model element and a reference to another model element that represents an alteration of at least one of the first and second structure (See column 79, lines 50-60, also see column 75, lines 39-67).

As to claim 58, Bowman-Amuah discloses including a description of a relationship between a described model element and a reference to another model element (See column 76, lines 52-67, also see column 77, lines 1-54).

As to claim 59, Bowman-Amuah discloses wherein each of the structures includes at least one attribute (See column 76, lines 52-67, also see column 77, lines 1-54).

As to claim 60, Bowman-Amuah discloses wherein the computer readable medium is a data transmission medium transmitting a generated data signal containing the data structure (See column 6, lines 53-67).

As to claim 61, Bowman-Amuah discloses wherein the computer readable medium is a memory of a computer system (See column 6, lines 53-67).

Allowable Subject Matter

9. Claims 1-56 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, and under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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The prior art of record (Bowman-Amuah -U.S. Patent No. 6,662,357 B1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), creating a first database element in a first model segment; under control of a second user, creating a second database element in a second model segment; creating an external first database element in the second model segment, the external first database element representing the first database element; substituting the first database element for the external first database element in the complete logical database model; and creating the relationship in the complete logical database model between the second database element and the substituted first database element, as claimed in Independent claim 22, in conjunction with remaining claims provisions.

Claims 2-7 are allowed over the prior art made of record, because they dependent from the allowed independent claim 1.

The prior art of record (Bowman-Amuah -U.S. Patent No. 6,662,357 B1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), receiving an indication of a first model segment that when displayed contains visual representation of a first model element, a visual representation of a reference to a second model element whose primary visual representation is contained in a second model segment when displayed; and replacing the indication of the visual representation of the reference with the retrieved indication of the primary visual representation, as claimed in Independent claim 40, in conjunction with remaining claims provisions.

Claims 41-45 are allowed over the prior art made of record, because they dependent from the allowed independent claim 40.

The prior art of record (Bowman-Amuah -U.S. Patent No. 6,662,357 B1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), for each of a plurality of model segments, for each model element indicated in the model segment; determining whether the indicated model element is a reference to another model element defined in another model segment; replacing the reference with the added indicated model element, so that references to other model elements in the model segments are replaced in the complete model with the other model elements, as claimed in Independent claim 40, in conjunction with remaining claims provisions.

Claims 47-52 are allowed over the prior art made of record, because they dependent from the allowed independent claim 46.

The prior art of record (Bowman-Amuah -U.S. Patent No. 6,662,357 B1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), creating a first model element and a second model element in a first model segment; creating a first relationship between the first model element and the second model element; creating a third model element in a second model segment;

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creating an external first model element in the second model segment, as claimed in

Independent claim 53, in conjunction with remaining claims provisions.

Claims 54-56 are allowed over the prior art made of record, because they dependent from the allowed independent claim 53.

Response to Arguments

10. Applicant's arguments filed on July 23, 2004 have been fully considered but they are not persuasive.

In response to Applicant's arguments directed to the reasoning behind the objects set forth in the office action with respect to claims 29-30, 39, 45, 52, 56, and 60-61. The Examiner's maintains that they are in fact independent claims and should be treated (re-written) as such. They are claiming different and distinct embodiments of the claimed invention.

In response to Applicant's arguments directed to rejections under U.S.C. 101 with respect to claims 8-24, 35-55, the Examiner maintains that the rejection stands specifically stating that if presumably the claims are directed to a "database" structure which is not claimed, they are claimed towards a method that must be embodied on a computer-readable medium to be preformed. Otherwise, it remains as just a model that can be constructed manually.

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The mere method of “creating a model” or “assembling a model” only constitute an abstract idea that is not implemented in a physical medium or stored in a database, hence the rejection stands.

Applicant’s argument that “Bowman-Amuah fails to disclose, suggest, or teach a description of a relation between a non-external model element and an external model element that represents an alteration of at least one of the structures associated with the model elements” is respectfully acknowledged but it is not deemed to be persuasive.

The Examiner point to Bowman-Amuah column 76, lines 1-49, also see column 79, lines 52-60, wherein Bowman-Amuah discloses external systems influence the design model and the applications structure. The process-modeling tool should enable the description to be documented in many formats including decision tables.

The terms “non-external” and “external” are not disclosed in the claim language. Neither are the means for developing the structures or relationships being claimed.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil
November 9, 2004


CHARLES RONES
PRIMARY EXAMINER